

REMARKS

The Office Action dated January 28, 2009 has been received and reviewed. This response, which was filed in lieu of an Appeal Brief, is submitted along with a Request for Continued Examination and a Petition for a One-Month Extension of Time, and is directed to that action.

Claims 1 and 5 have been amended, and claims 8-10 have been cancelled. Support for the amendment to claim 1 can be found throughout the specification, and in claim 10 as originally filed. No new matter has been added.

The applicants respectfully request reconsideration in view of the foregoing amendment and the following remarks.

Claim Objections

The Examiner objected to claim 1 because the phrase "with an extruder" is inconsistent with the previously presented claim 6, which was incorporated into claim 1 in the previous amendment. The applicants have amended claim 1 to replace the objectionable term to "within an extruder", thus obviating the objection.

Claim 5 was also objected to for being improperly dependent upon a cancelled claim. The applicants have amended claim 5 herein to

Claim Rejections- 35 U.S.C. §112

The Examiner rejected claims 1, 3, 5, 7-13 and 16-20 under 35 U.S.C. §112, first and second paragraphs because the phrase "wherein the temperature of the material with an extruder" is not consistent with the specification, and is indefinite. The applicants

have amended claim 1 herein by replacing the term "with an" to "within", thus obviating these rejections.

Claim Rejections- 35 U.S.C. §103

The Examiner rejected claims 1, 3, 5, 7-12 and 16-20 under 35 U.S.C. §103(a) as obvious over Zimmermann et al. (US 4,323,492) in view of Famili et al. (US 5,206,278). The applicants respectfully traverse this rejection.

The applicants submit that a *prima facie* case of obviousness cannot be established because the prior art references, as combined, fail to teach or suggest all the limitations of the presently claimed invention. The applicants submit that neither Zimmermann nor Famili teach an extrusion process for making pellets.

The presently claimed invention is directed to an extrusion process for making thermoplastic pellets. While Zimmermann is directed to a process for making polyvinyl alcohol (PVOH) pellets containing a plasticizer, wherein the method is carried out at an elevated temperature below the melting point of PVOH, Zimmermann's process is a *mixing* process, not an extrusion process. The Examiner continues to assert that Zimmermann teaches an extrusion process for making PVOH pellets, and cites col. 4, lines 19-24 of Zimmermann as support. However, the applicants fear that the Examiner has misread Zimmermann's teaching. The cited passage in Zimmermann states that "[t]he granular PVAL of the invention can be molded thermoplastically without any difficulty, for example by compression molding, injection molding and extrusion, and it is suitable for the manufacture of any shaped articles, for example, plates, tubes, profiles, fibers and, especially, films and sheets." (col. 4, lines 19-24). This does not mean that the

PVOH pellets can be made by extrusion processes, only that that the pellets, *after they are made*, can be further processed by extruding the pellets. *The pellets themselves are not made by extrusion, as in the present invention.*

Indeed, Zimmermann clearly makes his thermoplastic pellets in a mixing process. In particular, Zimmermann states that “[t]he invention also provides a process for the manufacture of a plasticizer-containing, pourable, tack-free granular polyvinyl alcohol capable of being processed thermoplastically by mixing polyvinyl alcohol granules with a plasticizer, which comprises intensely and homogenously mixing...polyvinyl alcohol granules and...plasticizer”. (col. 1, lines 49-62). Thus, by the time Zimmermann is ready to extrude, the PVOH pellets have already been made. This is in direct contrast to the presently claimed invention, which actually makes the thermoplastic pellets in an extrusion process. Likewise, Famili is also directed to extruding PVOH pellets after they are made, and fails to teach a process whereby thermoplastic pellets are made by an extrusion process.

The applicants also submit that a *prima facie* case of obvious cannot be established because a person of ordinary skill in the art would not be motivated to include the presently claimed carbohydrates into Zimmermann's process because Zimmermann has very specific temperature requirements that would violate the presently claimed limitation that the process be run at a temperature above the melting point of the plasticizer. In particular, during Zimmermann's process the maximum temperatures do not exceed 140°C, and during the cooling phase of his process, the temperature is reduced to anywhere between 35 to 70°C. Contrast this with the present invention, where the process temperature is above the melting point of the plasticizer, and because the claimed

carbohydrates each have a melting point of above 80°C or greater, the process temperatures of the presently claimed invention are much greater than Zimmermann allows. Essentially, Zimmermann teaches against the presently claimed invention.

Based on the foregoing reasons, the applicants respectfully submit that a *prima facie* case of obviousness cannot be established, and respectfully request that the Examiner withdraw these rejections.

The applicants believe the claims are now in condition for allowance, and such favorable action is respectfully requested. If any issues remain, the resolution of which can be advanced through a telephone conference, the Examiner is invited to contact the applicant's attorney at the phone number listed below.